

**REMARKS**

The instant Remarks are responsive to the Office Action mailed August 8, 2008. No claim amendments are submitted with this Response. Claim 27 has been withdrawn by the Office. Claim 21 is pending and under consideration.

**Election**

The Office Action states that previously submitted claim 27 is directed to an invention that is allegedly independent or distinct from the invention originally claimed. The Office Action further indicates that claim 27 is withdrawn from consideration.

Applicants submit that pursuant to MPEP § 821.04, claim 27 depends from and otherwise includes all the limitations of claim 21. Accordingly, Applicants respectfully request rejoinder of claim 27 upon the indication of allowability of claim 21. Applicants reserve the right to file one or more divisional or continuation application directed to non-elected subject matter.

**Claim Rejections – 35 U.S.C. § 102(b)**

The Office Action rejects claim 21 under 35 U.S.C. § 102(b) as allegedly anticipated by WO 99/04265 (OLD et al.) as evidenced by Accession No. AAX40073.

In particular, the Office Action states that, “WO 99/04265 characterizes the nucleic acid sequence of SEQ ID NO: 582 as belonging to NA Group 12, a subset of NA Group 3 coding for a human colon cancer antigen, where NA Group 3 is a subset of NA Group I, which are specifically disclosed as nucleic acids that are comprised within pharmaceutical compositions (page 6, lines 5-6), and the pharmaceutical compositions may include adjuvants” (see the Office

Action at page 7, 3rd paragraph). The Office Action concludes from this statement that the WO 99/04265 document anticipates all the limitations as recited in claim 21.

In response, Applicants submit that the cited document does not anticipate claim 21. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). (MPEP § 2131).

In particular, Applicants respectfully submit that the WO 99/04265 document does not disclose that SEQ ID NO: 582 belongs to the NA Group 12 and NA Group 3 subsets. Furthermore, the Office has not set forth where it considers the WO 99/04265 document to disclose that SEQ ID NO: 582 belongs to the NA Group 12 and/or NA Group 3 subsets. Rather, the Office appears to take the position that because the WO 99/04265 document discloses that SEQ ID NO: 582 is characterized as an NA Group I nucleic acid, and that SEQ ID NO: 582 is expressed by colorectal cancer cells, the WO 99/04265 document anticipates the claimed subject matter. However, Applicants submit that the WO 99/04265 does not anticipate the claimed subject matter at least because the WO 99/04265 document does not disclose a cancer vaccine comprising the specific combination of SEQ ID NO: 582 and an adjuvant.

Accordingly, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. § 102(b).

#### Claim Rejections – 35 U.S.C. § 112

The Office Action rejects claim 21 under 35 U.S.C. § 112 as allegedly failing to comply with the written description requirement. In particular, the Examiner states that the specification does not provide support for cancer vaccines comprising a DNA having 90% or more homology

to SEQ ID NO: 2, but rather refers to 90% or more homology with respect to sequences that *hybridize* to SEQ ID NO: 2.

In response, Applicants submit that the claimed subject matter is described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors, at the time the application was filed, were in possession of the claimed invention. In particular, Applicants submit that the passages referred to in the Response dated May 5, 2008, do provide support for DNA having 90% or more homology to SEQ ID NO: 2.

Pages 11-12, Section (2) and pages 16-19, Sections (5) and (6), teach that the DNA of the present invention can be used as a probe or as a therapeutic agent against cancers. DNA of the present invention includes DNA which encodes a cancer antigen or immune-stimulating protein (see, e.g., page 11, lines 12-14). For example, the DNA of the present invention is (a) DNA which has the nucleotide sequence shown in SEQ ID NO: 2, (b) DNA hybridizing with the DNA having the nucleotide sequence shown in SEQ ID NO: 2 under stringent conditions, and encoding a protein having immune-stimulation activity; and (c) DNA having a partial sequence of the DNA according to (a) or (b) above, and encoding a protein having immune-stimulating activity (see, e.g., page 11, lines 12-21). Page 12, lines 1-5 further describes DNA having a certain level of homology with the nucleotide sequence of the DNA *used as a probe*, including DNA with 90% or more homology with the DNA used as a probe.

Therefore, at least because the specification teaches that the DNA of the instant invention (including SEQ ID NO: 2 which encodes a cancer antigen) can be used as a probe, and because the specification describes DNA having a homology of 90% or more with DNA which is used as a probe, the specification provides written description support for the claimed subject matter, i.e.

DNA having 90% or more homology to SEQ ID NO: 2, and encoding a protein having immune-stimulating activity.

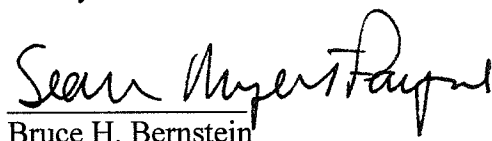
Accordingly, Applicants respectfully submit that claim 21 does satisfy the written description requirement and respectfully request the withdrawal of the rejection under 35 U.S.C. § 112, first paragraph.

### CONCLUSION

In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections of record, and allow all the pending claims. No additional fee is believed due at this time. If, however, any additional fee is necessary to ensure consideration of the submitted materials, the Patent and Trademark Office is hereby authorized to charge the same to Deposit Account No. 19-0089.

Any comments or questions concerning this application can be directed to the undersigned at the telephone number listed below.

Respectfully Submitted,  
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